UTILITY
PATENT APPLICATION
TRANSMITTAL

			O
	Attorney Docket No.	15114H-071400US	30
	First Inventor	Dhanoa, Kulwinder	S. O.
Title		SDRAM CONTROLLER	53 U
	Express Mail Label No.	EV3308551	<u> </u>

(Only for new nonprovisional applications under 37 CFR 1.53(b))

See MPEP chapter 600 concerning design patient application contents. 1.		A DDI LO ATION D	THENTO		Mail Stop F	Patent Application	
1. S Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) 2. Applicant claims small entity state. 3. See 37 CFR 1.27. 3. Specification [Total Pages 16] (preferred arrangement set forth below) - Descriptive title of the Invention - Cross Reference to Related Applications - Statement Regarding feet sponsored R & D - Reference to sequence listing, a table, or a computer program (sing appendix - Background of the Invention - Brief Description of the Drawings (if filed) - Deliance Description - Brief Description of the Drawings (if filed) - Deliance Description - Abstract of the Disclosure 4. Drawing(s) (35 U.S.C.113) [Total Sheets 3] 5. Oath or Dedaration [Total Pages] 1 1. Delease Submits of the Disclosure 4. Drawing(s) (35 U.S.C.113) [Total Sheets 3] 5. Oath or Dedaration [Total Pages] 1 1. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application. see 37 CFR 1.63(0)(2) and 1.33(b). 6. Application Data Sheet. See 37 CFR 1.76 1.8. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification information: 1. If a CONTINUING APPLICATION Check appropriate box, and supply the requisite information below and in the first sentence of the specification information: 1. If a CONTINUING APPLICATION Check appropriate box, and supply the requisite information below and in the first sentence of the specification information: 1. If a CONTINUING APPLICATION Check appropriate box, and supply the requisite information below and in the first sentence of the specification information: 1. Description of the supplication and in sheety incorporated formation and interest of the discolosure of the accompanying continuation or divisional application and in sheety incorporated reference. The incorporation can only be reled upon when a portion has been indeventedly only interest of the prior application of the submitted application parts. 19. CORRESPONDENCE ADDRESS	Soo MPER			ADDRESS TO			
(Submit an original and a duplicate for fee processing) 2							
2			7. CD-ROM o	r CD-R in duplica Program <i>(Append</i>	ate, large table or		
a.	2.	Applicant claims small entity s	Nucleotide and	or Amino Acid S			
Descriptive title of the Invention Cross Reference to Related Applications Statement Regarding Fed sponsored R & D Reference to sequence listing, a table, or a computer program listing appendix Background of the Invention Brief Summary of the Invention Brief Summary of the Invention Claim(s) Detailed Description of the Drawings (if filed) Detailed Description Claim(s) Abstract of the Disclosure A. ☑ Drawing(s) (35 U.S.C.113) [Total Sheets 3] Drawin	3. 🛛 S	Specification					
- Statement Regarding Fed sponsored R & D Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Summary of the Invention - Brief Summary of the Disclosure - Claim(s) - Abstract of the Disclosure 4.	-	Descriptive title of the Invention	·	b. Specification	Sequence Listing	g on:	
or a computer program listing appendix Background of the Invention Brief Summary of the Invention Claim(s) - Detailed Description - Claim(s) - Abstract of the Disclosure 4. Drawing(s) (35 U.S.C.113)	-	Statement Regarding Fed sponso	ored R & D	i. ☐ CD-RON	for CD-R (2 cop	ies); or	
- Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure 4.		or a computer program listing app	•	ii. 🗌 paper n	umber of pages		
- Detailed Description - Claim(s) - Abstract of the Disclosure 4.	-	Brief Summary of the Invention		c. Statemen	s verifying identi	ty of above copies	
Abstract of the Disclosure 4.			(if filed)	ACCOM	PANYING APPL	ICATIONS PARTS	
4.	-	Claim(s)					
11. ☐ English Translation Document (if applicable) a. ☐ Newly executed (original or copy) b. ☐ Copy from a prior application (37 CFR 1.63 (d)) (for a continuation/divisional with Box 18 completed i. ☐ DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63 (d)(2) and 1.33(b). 6. ☐ Application Data Sheet. See 37 CFR 1.76 6. ☐ Application Data Sheet. See 37 CFR 1.76 1.6 If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: ☐ Art Unit: ☐ Art Unit: ☐ For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS □ Customer Number □ Copies of IDS Statement (IDS)/PTO-1449 ☐ Citations Statement (IDS)/PTO-1449 ☐ Citations Statement (IDS)/PTO-1449 ☐ Citations Statement (IDS)/PTO-1449 ☐ Citations of IDS (Idade) ☐ Citations (Idade) ☐ Certified Copy of Priority Document (IDS) (Should be specifically itemized) ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed) ☐ Idade Certified Copy of Priority Document(s) (if foreign priority is claimed) ☐ Idade Certified Copy of Priority Document(s) (if foreign priority is claimed) ☐ Idade Certified Copy of Priority Document(s) (if foreign priority is claimed) ☐ Idade Certified Copy of Priority Document(s) ☐ Idade Certified Copy of Priority Do	_						
a.			-	11. English	ranslation Docu	ment (if applicable)	
b.		-	• • •	_	•	<u> </u>	
(for a continuation/divisional with Box 18 completed i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. Application Data Sheet. See 37 CFR 1.76 Application Data Sheet. See 37 CFR 1.76 Sequivalent	b. [Copy from a prior application	on (37 CFR 1.63 (d))		` '	19 Citations	
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. Application Data Sheet. See 37 CFR 1.76 Application Data Sheet. See 37 CFR 1.76 16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Prior application information: Examiner For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS OR Correspondence address below Name		'	•		-	(MPEP 503)	
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6.	i.			(Should be specifically itemized)			
6. Application Data Sheet. See 37 CFR 1.76 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(8)(i). Applicant must attach form PTO/SB/35 or its equivalent 17. Other: Permit to File Abroad 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No: Art Unit: For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS OR Correspondence address below Name Correspondence address below Name Correspondence address below Name Correspondence address Correspondence address Correspondence address Correspondence address Correspondence Correspondence	•	named in the prior application					
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No: Prior application information:				(b)(2)(B)(i). Applicant must attach form PTO/SB/35			
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No:							
□ Continuation □ Divisional □ Continuation-in-part (CIP) of prior application No: □ Art Unit: □ Art U				the requisite information	on below and in th	e first sentence of the	
Prior application information: Examiner	•	· ·			orior application No	·	
under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS Customer Number 20350 OR □ Correspondence address below Name		-			• •		
reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS Customer Number 20350 OR Correspondence address below Name							
Name			19. CORRESPON	DENCE ADDRESS	_		
	⊠ Custo	omer Number .	203	50	OR 🗆 G	Correspondence address below	
Address	Name						
Address	Address						
	Address						
City State Zip Code	City State		_	Zip Code			
Country Telephone Fax	Country		·····	Fax			
Name (Print/Type) Babak S. Sani Registration No. (Attorney/Agent) 37,495	Name (Print/Type) Babak S. Sani			Registration No. (Atto	mey/Agent)	37,495	
Signature Date December 30, 2003	Signature		lab-X		Date	December 30, 2003	

FEE	TR	AN	SMIT	TAL
4	for	FY	2004	

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 770

	Complete if Known	
Application Number		
Filing Date		
First Named Inventor	Dhanoa, Kulwinder	
Examiner Name		
Art Unit		
Attorney Docket No.	15114H-071400US	

METHOD OF PAYMENT (check all that apply)						FEE CA	ALCULATION (continued)				
Check		Credit Card	Moi	ney Order 🔲 Othe	er None	3. ADD	ITIONAL I	FEES			
Deposit Account:				Large	Entity	Small	Entity	-			
Deposit Account		20-14:	30			Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid_
Number		= 0				1051	130	2051	65	Surcharge - late filing fee or oath	
Deposit		`				1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
Account		Townsen	d and To	wnsend and Cre	ew LLP	1053	130	1053	130	Non-English specification	
Name		L			······································	1812	2,520	1812	2,520	For filing a request for reexamination	
The Director i Charge fe		norized to: idicated belo		<i>that apply)</i> Credit any overpayn	nents	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
	•	•		derpayment of fee(s	s)	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
				for the filing fee		1251	110	2251	55	Extension for reply within first month	
to the above-id	entine					1252	420	2252	210	Extension for reply within second month	
		FE.	E CALC	ULATION		1232	420	2232	210	Extension for reply within second month	
	FILII	NG FEE				1253	950	2253	475	Extension for reply within third month	
Large Entity	Sm	all Entity	_			1254	1,480	2254	740	Extension for reply within fourth month	
Fee Fee	Fe		Fee De	scription	Fee Paid						
Code (\$)	Co					1255	2,010	2255	1,005	Extension for reply within fifth month	
1001 770	200		Utility fil	=	770	1401	330	2401	165	Notice of Appeal	
1002 340 1003 530	200 200	-	_	filing fee		1402	330	2402	165	Filing a brief in support of an appeal	
1003 530 1004 770	200		Plant fill	ing lee e filing fee		1403	290	2403	145	Request for oral hearing	L
1004 770	200			onal filing fee		1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$)770					1452	110	2452	55	Petition to revive - unavoidable		
		30810	/ IAL (1)		(3)//0	1453	1,330	2453	665	Petition to revive – unintentional	
2. EXTRA	CLA	M FEES	FOR UTI	LITY AND REIS	SUE	1501	1,330	2501	665	Utility issue fee (or reissue)	
				Fee from		1502	480	2502	240	Design issue fee	
		_ E	xtra Claims		Fee Paid	1503	640	2503	320	Plant issue fee	
Total Claims	13	-20** =	р	X\$18	= \$0	1460	130	1460	130	Petitions to the Commissioner	
Independent Claims	3] -3** =	6	X\$86	= \$0	1807	50	1807	50	Petitions related to provisional applications	
Multiple	L	J	L	J		1806	180	1806	180	Submission of Information Disclosure Stmt	
Dependent			•			8021	40	8021	40	Recording each patent assignment per	
Large Entity Fee Fee	_	mall Entity		_						property (times number of properties)	
Code (\$) 1202 18		ode (\$		Fee Description Claims in excess of	F 20	1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1202 18			9 43	Independent claims		1810	770	2810	385	For each additional invention to be	
1203 290			45 45	Multiple dependent						examined (37 CFR § 1.129(b))	
1204 86			43	** Reissue indepen over original pate	dent claims	1801	770	2801	385	Request for Continued Examination (RCE)	
1205 18		2205	9	** Reissue claims in and over original	n excess of 20	1802	900	1802	900	Request for expedited examination of a design application	
	SUBTOTAL (2) (5)0				Other fe	e (specify)					
**or number pr	evious	sty paid, if gre	ater; For Re	eissues, see above		*Reduce	od by Rasi	· Filing F	ee Paid	SUBTOTAL (3) (\$)	
				I VEGUCE	o by basic	y r	CC r aiu	(2)	i		

SUBMITTED BY			Complete (if applicable)		
Name (Print/Type)	Babak S. Sani	Registration No. (Attorney/Agent)	37,495	Telephone	415-576-0200
Signature Salah A				Date	December 30, 2003

NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i)

First N	amed Inventor	Dhanoa, Kulwinder	
Title	SDRAM CONTI	ROLLER	
Atty Do	ocket Number	15114H-071400	

I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

December 30, 2003 Date

(415) 576-0200 Telephone Number Babak S. Sani / Reg. No. 37,495 Typed or printed name

Signature

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**







Concept House Cardiff Road Newport South Wales NP10 8QQ

16 December 2003

ABLE COPY

PERMIT TO FILE ABROAD Section 23(1), Patents Act 1977

KULWINDER DHANGA	A
1	A A
	BEST
is/are hereby authorised to file or cause to be filed outside	the United Kingdom an application
for a patent in respect of an invention called.	
MEMORY CONTROLLER	
· · · · · · · · · · · · · · · · · · ·	
-	
and described in the documents submitted to this Office.	
and described in the documents submitted to his Office.	

M G WILSON for the Comptroller

BEST AVAILABLE COPY

DP Per 2/77